



**CONSTRUCTION DETAILS**

A. INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT. AND 70 FT. MAST ARM (CUT 50 FT. ARM TO 40 FT. CLEAN, GALVANIZE AND CAP) LED BLACK FACE SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA AND 20 FT. LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (NOTE: 1-3 IN. SCHEDULE 80, 90-DEGREE POLYVINYL CHLORIDE CONDUIT BEND)

B. INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT. AND 70 FT. MAST ARMS (CUT 50 FT. ARM TO 45 FT. CLEAN, GALVANIZE AND CAP) LED BLACK FACE SIGNAL HEADS, SIGNS, AND VIDEO DETECTION CAMERAS. (NOTE: 1-3 IN. SCHEDULE 80, 90-DEGREE POLYVINYL CHLORIDE CONDUIT BEND)

C. INSTALL NEMA "6" BASE MOUNTED CABINET AND CONTROLLER WITH ALL THE NECESSARY EQUIPMENT. (NOTE: 2-4 IN. AND 2-2 IN. SCHEDULE 80, 90-DEGREE POLYVINYL CHLORIDE CONDUIT BENDS)

D. INSTALL METERED SERVICE PEDESTAL.

E. INSTALL 4 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT - BORED.

F. INSTALL 4 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT - TRENCHED.

G. INSTALL 3 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT - TRENCHED.

H. INSTALL 2 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT - TRENCHED.

J. INSTALL 4 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT - BORED. STUB OUT CONDUIT BEND AT BASE OF UTILITY POLE. (FOR UNDERGROUND ELECTRICAL SERVICE)

K. INSTALL 2 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT - BORED. STUB OUT CONDUIT BEND AT BASE OF UTILITY POLE. (FOR UNDERGROUND TELEPHONE SERVICE)

L. INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT FOR DETECTOR WIRE SLEEVE.

M. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 500 FT LEAD-IN.

N. INSTALL MICROLOOP PROBE SET WITH 500 FT LEAD-IN.

O. INSTALL HANDHOLE.

P. USE EXISTING CONDUIT.

R. USE EXISTING HANDHOLE. CAP AND ABANDON EXISTING CONDUIT, UNLESS IT IS TO BE USED.

S. REMOVE EXISTING POLE, SPAN WIRE, SIGNS, AND SIGNAL HEADS.

T. REMOVE EXISTING BASE MOUNTED CONTROLLER AND CABINET.

U. REMOVE EXISTING HANDHOLE. CAP AND ABANDON EXISTING CONDUIT.

V. DISCONNECT AND ABANDON EXISTING LOOP DETECTOR

W. EXISTING BGE POLE FOR UNDERGROUND POWER SERVICE AND UNDERGROUND PHONE DROP. EXISTING OVERHEAD POWER FEED TO BE REMOVED.

X. INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOP LINE).

Y. DISCONNECT AND ABANDON EXISTING PROBES.

Z. EXISTING BGE POLE TO BE REMOVED.

aa. INSTALL 3 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT - BORED.

**GEOMETRIC LEGEND**

PROPOSED  
EXISTING

**LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES**

AERIAL CABLE  
ELECTRIC  
TELEPHONE  
GAS  
SEWER  
STORM DRAIN  
WATER  
CABLE TV

**PROPOSED SIGNS**

13,14  
← Harford RD →  
Belair RD →  
D-3  
VAR. X 32"

17,18  
← Bel Air Bypass →  
Belair RD →  
D-3  
VAR. X 32"

19,23  
ONLY  
R3-5 (L)  
30" X 36"

20,24  
R3-6L  
30" X 36"

**PROPOSED SIGNALS**

1,4  
12" 8" LED

2,5  
12" LED

3,6,9,12  
12" LED

8,11  
12" LED

7,10  
8" 12" LED

**PROPOSED VIDEO DETECTION CAMERA**

a, b, c, d

**NEMA PHASING**

01 02 03 04  
05 06  
FLASHING

PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY  
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY

**GENERAL NOTES**

1. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE - THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD - IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.

2. ALL EXISTING UNUSED ELECTRICAL CABLES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

3. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF PROPOSED GEOMETRICS PRIOR TO THE INSTALLATION OF THE SIGNAL EQUIPMENT.

4. ALL PAVEMENT MARKINGS SHOWN ARE PROPOSED AND UNLESS OTHERWISE NOTED, ARE TO BE INSTALLED IN ACCORDANCE WITH SHA STANDARDS. THE CONTRACTOR SHALL CONTACT THE ASSISTANT DISTRICT ENGINEER - TRAFFIC AT (410) 321-2781, 48 HOURS PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS TO CONFIRM LOCATION.

5. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.

6. THE VIDEO DETECTION CAMERAS ARE SHOWN IN APPROXIMATE LOCATIONS AND ARE FOR INFORMATION PURPOSES ONLY. EXACT LOCATIONS AND AIMING DIRECTIONS OF THE VIDEO DETECTION CAMERAS SHALL BE DETERMINED AND/OR APPROVED BY THE ENGINEER.

**APPROVALS**

TEAM LEADER  
ASST. DIV. CHIEF  
DIVISION CHIEF  
OFFICE DIRECTOR

**REVISIONS**

1. RECONSTRUCT SIGNAL DUE TO NEW GEOMETRICS  
SHA NO. 882501-476  
KJS  
1. REPLACE PASSAGE DETECTION 7-07-06  
SHA NO. BW996MB2  
TMZ  
H CHANGE LANE ASSIGNMENT  
N.B. MD 147 SIGNAL SHOP  
INSTALL SIGN  
4-04-06  
DJD MAR

**PREPARED BY**  
**URS**  
HUNT VALLEY, MARYLAND

**SCALE** : 1" = 20' (FULL SIZE)

**STATE OF MARYLAND**  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
**TRAFFIC SIGNAL PLAN**  
**US 1 (BELAIR RD) AND**  
**HARFORD ROAD (MD 147)**

SCALE 1" = 20' DATE 2-14-80 CONTRACT NO. H-882-501-476

DESIGNED BY B. THOMPSON COUNTY HARFORD  
DRAWN BY H. KILIAN LOGMILE 12001002.67  
CHECKED BY T.I.M.S. NO. E926  
F.A.P. NO. N/A TOD NO.  
TS NO. 610 J DRAWING NO. SHEET NO. 47 OF 48

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